

DESCRIPTIONS OF SOME NEW SPECIES OF
AUSTRALIAN HESPERIDÆ;

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Fam.—HESPERIDÆ. (*Leach.*)

Genus—TAGIADES. (*Hub.*)

T. Gamelia, n. sp.

Upperside.—Primaries.—Pale brown, with nine colourless transparent spots, two within and at end of cell, two others below and slightly beyond these, and a series of five very small ones forming a bent row a short distance from and parallel with apex.

Secondaries.—With the basal and apical areas pale brown, the rest of wing pure white, with two quadrate black patches near apex, the upper one being the least.

Underside.—Primaries.—As above, with a whitish patch near hinder angle.

Secondaries.—All white, with apical angle, broadly towards base, dark-brown; two brown patches near apex, of which the upper is the largest; a short line of brown, close to outer margin, not reaching anal angle, or extending to terminations of median; base of wing with a bluish tinge.

Thorax and abdomen, above, pale brown; beneath, light grey.

Ex.— $1\frac{8}{12}$ — $1\frac{10}{12}$ in.

Hab.—Cape York (N. Queensland). Coll.—Miskin.

This species is allied to *Japetus*, (*Cr.*), which it resembles somewhat on the underside. The sexes do not differ.

Genus—PAMPHILA. (*Fab.*)

P. Autoleon, n. sp.

♂ *Upperside*.—Primaries.—Yellowish-black; an oblique, nearly transverse, band of orange-yellow from median vein beyond termination of cell, to sub-median, about the centre, thence narrowly along hind margin to base; three small spots of same color, from costa to sub-costal, beyond cell; base of costa with short yellow streak; fringe narrow, yellow.

Secondaries.—As in primaries, but with a short transverse band divided by nervules into four spots, beyond cell nearest to apex; abdominal fold densely clothed with long yellow-brown hairs. Fringe orange-yellow, broad.

Underside—Primaries.—Costa and outer margin broadly ferruginous; basal area and hinder margin dark purplish brown; yellow parts as above except in hinder margin.

Secondaries.—Dark purplish-brown, with faint indication of band of upper side.

♀ As in ♂, but on the upper side with the oblique transverse band of primaries narrower and broken into separate spots, not continued to base; a short transverse band in centre of cell; costal sub-apical series of three spots much smaller,

Secondaries with the transverse band narrower and divided by the veins.

Underside, with the markings as above, but the band of secondaries being obscured

Thorax and abdomen on both sides dark-brown.

Ex.— $1\frac{6}{12}$ in. Hab—Cardwell (N. Queensland).

♂ Coll.—Miskin. ♀ Coll.—Lucas.

P. Fuliginosa, n. sp.

♀ *Upperside*.—All the wings sooty black; hind ones with a broad pure white fringe.

Underside.—Dark reddish-black; basal area of primaries black.

Secondaries with a transverse row beyond the middle, of somewhat obscured small bluish spots.

Thorax and abdomen above, black; beneath, light brown.

Ex.— $1\frac{6}{12}$ in. Hab.—Cardwell (N. Queensland).

Coll.—Miskin.

P. Albifascia, n. sp.

♂ *Upperside*.—Both wings pale black, with a bluish tinge.

Primaries.—With a sub-apical transverse row of four small pure white spots, from costa to median vein; a somewhat oblique transverse band of pure white, from median to sub-median vein.

Secondaries.—With a broad pure white transverse band occupying central area.

Underside.—As above, but paler; the white portions somewhat more extended; in the secondaries nearly to base.

Abdomen and thorax, above, black; beneath whitish. Club of antennæ white.

Ex.— $1\frac{3}{12}$ in. Hab.—Herbert River (N. Queensland).

Coll.—Miskin.

Genus—*HESPERILLA* (*Hew*).

H. Atromacula, n. sp.

♂ *Upperside*—Primaries.—Basal area ochreous-brown, rest of wing dark-brown; a light yellow semi-transparent patch within and at termination of cell; another longer and narrower below and beyond; and contiguous to and below both, a large round black spot in nearly the centre of wing; a light yellow speck between the 3rd and 4th sub-costal branches at their base; another, larger, immediately below.

Secondaries.—The whole of the wing, except a widish border of dark-brown to costal, outer, and abdominal edges, clothed thickly with long ochreous-brown hairs. Fringe of both wings pale brown.

Underside.—Wholly pale shining brown ; hinder margin of primaries somewhat darker.

Primaries with yellow spots as above, but indistinct. Secondaries with a circular outer row of dark specks and two central specks.

Thorax and abdomen—above, dark-brown ; beneath, pale brown.

Ex.— $1\frac{4}{7}$ in. Hab.—Victoria. Coll.—Miskin.

H. Scepticalis (Rosk.)

Rosenstock's description and figure in Ann. & Mag. Nat. Hist. (5) Vol. XVI. p. 329, T. 11, f 2, is of the ♀. I now give a description of the opposite sex.

♂ *Upperside*.—Dark brown, with small diaphanous spots. Primaries with one discocellular longitudinal spot bent upwards at end, near termination of cell ; a small one below and beyond this ; three minute ones transversely, from costa towards apex

Secondaries with the diaphanous markings forming a short transverse band in centre of wing.

Underside very pale-brown, with slightly reddish tinge ; the hinder border of primaries lighter, and a darkish suffusion towards hinder angle ; diaphanous markings as above.

Ex.— $1\frac{1}{12}$ in. Hab.—Victoria ; Port Denison (N. Queensland).

Coll.—Miskin.

H. Tasmanicus, n. sp.

♀ *Upperside*.—Shining brown, with diaphanous transverse markings.

Primaries. — One narrow band reaching across cell, near termination ; another from costa near apex, not quite reaching 5th sub-costal branch ; another midway, but below these, somewhat oblique, formed by two spots ; an indistinct appearance of another below discal one.

Secondaries.—With two minute spots, transversely, below the middle.

Underside.—Shining greyish brown; outer area of primaries, except extreme margin, with a reddish tinge: markings as above; those in secondaries somewhat obscure.

Thorax and abdomen—above, brown; beneath, grey.

Ex.—1 in. Hab.—Tasmania. Coll.—Miskin.

H. Humilis, n. sp.

♂ *Upperside*.—Dark shining brown, with very minute diaphanous spots on primaries; three of which are sub-apical and transverse; one within cell, transversely elongate; one below and beyond end of cell. The sexual black band is broad and shining, margined with opaque black.

Underside.—Light-brown; hind margin of primaries pale buff; markings as above.

Secondaries, light-brown, with a rather obscure transverse somewhat curved band of reddish brown, a short distance from outer margin; an obscure discal spot of same colour.

♀ Similar to ♂, but with three spots transversely, below and beyond cell; underside as in ♂.

Thorax and abdomen—above, dark-brown; beneath, light-brown.

Ex.— $1\frac{1}{12}$ in. Hab.—Brisbane (Queensland). Coll.—Miskin

This species is very near to *Doubledayii*, but is easily distinguished, and is a smaller and less common species.

H. Croceus, n. sp.

♂ *Upperside* — Primaries.—Shining brown; basal area to nearly middle, suffused with ochreous; with diaphanous spots arranged as follows:—Three small ones from costa transversely towards apex; one elongate within and towards end of cell, elbowed at termination; two below and beyond end of cell.

Secondaries.—Shining brown; discal area ochreous; two small diaphanous spots in centre.

Underside.—Ochreous; yellow spots as above; some dark suffusion, contiguous to and beyond lower spots; anal fringe of secondaries whitish.

♀ *Upperside*.—As in male; discal spot of primaries not elongate; and in addition two other spots below discal patch. No spots on secondaries, hind margins of which are dark-brown.

Underside.—Saffron yellow; primaries with hind margin light-brown, and some dashes of black towards hinder angle; markings as above, except that the two lower spots are absent, and other patches slightly enlarged; fringes in both wings marked in black at termination of nervules.

Ex.—♂ $1\frac{4}{12}$ in.; ♀ $1\frac{6}{12}$ in. Brisbane—Cooktown (Queensland). Coll.—Miskin.

H. Fulgidus, n. sp.

♀ *Upperside*.—Light-brown, slightly darker towards base in primaries, with diaphanous markings.

Primaries—The markings consisting of a transverse somewhat oblique row of three spots from beyond end of cell towards base, graduating in size from the top, which is the least; a small one in centre of cell, nearer to median; two small spots, sub-apical.

Secondaries.—With a series of four contiguous elongate spots, forming a transverse band in centre of wing.

Underside.—Shining yellowish brown; base of primaries and hinder margin nearly to angle, dark-brown; spots on both wings as above.

Thorax and abdomen—above, dark-brown; beneath, light-brown.

Ex.— $1\frac{3}{12}$ in. Hab.—Brisbane. Coll.—Miskin.

Genus—TRAPEZITES (*Hub.*)*T. Idothea*, n. sp.

♀ *Upperside*.—Primaries.—Reddish brown; large golden oblong semi-transparent spot within and at extremity of cell; below and extending beyond, but not quite touching it, a series of three sub-ovate conterminous golden semi-transparent spots, divided only by the veins, the lower one much the least; below these, but slightly nearer the base, and touching the submedian, another medium-sized golden spot; a small golden speck about one-third from the base, also above, and touching the submedian; about one-third from apex near costa, a short transverse row of three contiguous minute spots; costa from base about two-thirds, rufous; fringe, obscure brown.

Secondaries.—Dark-brown, with a rich-orange patch from near the base where it is narrow extending over discal area, widening considerably outwardly, the outer edge being crenated. Fringe rufous. Base of both wings densely clothed with long light-brown hairs.

Underside.—Primaries.—Costa and apex widely reddish-brown; hind margin pale-brown; discal area black, within which the large spots of upper side are reproduced in two large quadrate patches, of which the upper and nearest to the base is the least; sub-apical small spots as above.

Secondaries.—Uniform red-brown with three black specks between the apical and anal angles, a short distance from and parallel with outer border.

Thorax and abdomen—above, dark-brown; beneath, light-grey.

Ex.— $1\frac{2}{12}$ in. Hab.—Victoria. Coll.—Lucas.

This species is clearly distinct from *Jachus* (F) to which it most nearly approaches. The specimen from which my description is made, together with some others referred to in this paper, are contained in the collection of Dr. Lucas of Brisbane, who has obligingly lent them to me for this purpose.

T. Phyllyra, n. sp.

Upperside.—Primaries.—Light-brown, basal area ochreous ; centre of cell towards end, occupied by a square semi-transparent golden spot bordered on each side within the cell, by an irregular patch of velvety black ; below this one an oblong patch of same colour, above the outer end of which is another smaller similar spot ; a small spot paler in colour touching, but above median nervure about midway ; three small pale yellow spots transversely from costa near apex.

Secondaries.—Reddish-brown, with broad transverse orange band not reaching either margin ; base clothed with long ochreous hairs.

Underside.—Primaries ashy-grey ; discal area yellow with two black patches, one at end of cell, the other crossing cell about the middle ; indistinct sub-apical spots.

Secondaries.—Wholly ashy-grey, with slight indication of orange band of upper side ; a sub-marginal row of very indistinct small brown rings, from apical to anal angles, also extending along abdominal margin, and two in centre of wing.

Thorax and abdomen—above, dark-brown ; beneath, silver-grey. The sexes are alike.

Ex.—♂ $1\frac{3}{12}$ in. ; ♀ $1\frac{5}{12}$ in. Hab.—Victoria. Coll.—Lucas.

Genus—*APAUSTUS* (*Hub.*)

A. Minimus, n. sp.

Upperside.—Primaries.—Dark-brown, with shining yellow markings arranged as follows :—Three parallel longitudinal narrow bands from the base to centre of wing divided by the costal and sub-costal veins, the two upper not reaching the base ; similar one on hinder margin ; a transverse one a short distance from and parallel with outer margin from hinder margin, but not reaching apex ; a short transverse one from costa about one-fourth from apex, not touching transverse bands ; another short sub-apical one nearly touching transverse band ; costa yellow.

Secondaries.—Dark-brown, with a bright-yellow transverse broad band, from near apical angle not quite reaching abdominal border; a short discal band from base; a small sub-apical spot.

Underside.—Primaries.—Basal area orange-yellow; apical area lighter yellow; hinder margin broadly very dark-brown; transverse band and short central band golden yellow as above but less developed; sub-apical band as above, variable, sometimes obsolete, sometimes silvery.

Secondaries.—Ashy-yellow, with the transverse band of upper side more or less developed, sometimes silvery; the basal band of upper side being here represented by a small spot, not always present.

Thorax and abdomen—above, dark-brown; beneath, light yellow to light-grey.

Ex — $\frac{11}{12}$ in. Hab.—Victoria; W. Australia. Coll.—Miskin.

This is a form intermediate between *Agraulia* (*Hew.*) and *Lascivia* (*Rosk.*), but nearer to the latter from which, however, it is sufficiently distinguished.

It is possible—indeed, probable—that some of the species above described have been already made known to science, and are included in some of the recent notes of Plotz, Mabillet, & Semper, in such publications as the *Stett. Ent. Zeit.*, *Compt. rend. Ent. Belg.*, *Petit. nouv. Ent.*, and *Journ. Godff.*, to which I have been unable to refer; but even if some of my names have to be hereafter sunk as synonyms, at least the descriptions will be useful in the colonies for identification, the above-mentioned works being inaccessible to local students.
